

# Automotive Technology 7<sup>th</sup> Edition

## Chapter 107 – Electronic Stability Control Systems

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. The Need for Electron Stability Control, and Federal Motor Vehicle Safety Standard (FMVSS) No. 126
2. Sine with Dwell Test, ESC Sensors, Traction Control, ESC/TC Diagnosis



#### **OBJECTIVES:**

1. Discuss the need for electronic stability control (ESC).
2. Describe the FMVSS requirements.
3. Describe the sine with dwell (SWD) test.
4. List the sensors needed for the ESC system.
5. Describe how a traction control (TC) system works.
6. Explain how to diagnose ESC/TC system faults.



#### **RESOURCES:** (All resources may be found at [jameshalderman.com](http://jameshalderman.com))

1. Task Sheet: Traction Control/Vehicle Stability System
2. Crossword Puzzle and Word Search
3. Chapter PowerPoint
4. Videos: [\(A5\) Brakes Videos](#)
5. Animations: [\(A5\) Brakes Animations](#)



#### **ACTIVITIES:**

1. Task Sheet: Traction Control/Vehicle Stability System
2. Crossword Puzzle and Word Search



#### **ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.
2. Complete end of chapter quiz from the textbook.
3. Complete multiple choice and short answer quizzes downloaded from the website.



#### **CLASS DISCUSSION:**

1. Review and group discussion chapter [Frequently Asked Questions](#) and [Tech Tips](#) sections.
2. Review and group discussion of the five (5) chapter [Review Questions](#).



#### **NOTES AND EVALUATION:**